

IN THE CLAIMS:

Please cancel Claims 2, 4, 11-15, and 17-19, without prejudice or disclaimer of subject matter. Please amend Claims 1, 8, and 9, as indicated below. The following is a complete listing of claims and replaces all prior versions and listings of claims in the present application:

1. (Currently Amended) A moving image coding apparatus that sequentially inputs and codes image data of frames constituting a moving image, the apparatus comprising:

a mode selection unit that adaptively selects, for each frame, either a first coding mode ~~[[using]]~~ of coding a frame of interest by referring to another frame using an inter-frame correlation ~~coding method~~ or a second coding mode of coding a frame ~~separately of interest~~ without referring to another frame using an intra-frame coding method;

a storage unit that stores a frame image;

a segmentation unit that segments image data of an input frame into a plurality of blocks;

a decoding unit that locally decodes coded image data ~~in accordance with an output from~~ of the frame of interest only when the frame of interest had been encoded in the second coding mode selected by said mode selection unit ~~and stores the coded~~ unit and stores the decoded image data of the frame of interest into said storage unit;

a computation unit that (i) extracts, from a previous frame that has been locally decoded and stored in said storage unit by said decoding unit, predicted data of a block image obtained by segmentation by said segmentation unit and outputs a block obtained by subtracting the predicted data from the segmented block image, if the mode selected by said mode selection unit is the first coding mode, or (ii) outputs the block segmented by said segmentation unit, if the mode selected by said mode selection unit is the second coding mode;

a transformation unit that ~~transforms~~ executes discrete wavelet transformation for
the block obtained by said computation unit ~~[[into]]~~ to obtain spatial frequency component data;

a code data generating unit that encodes the spatial frequency component data for
each bitplane to generate code data for each bitplane;

an adjusting unit that adjusts a code data amount by discarding code data
corresponding to bitplanes from a least significant bit position to a predetermined bit position;
and

an output unit that outputs remaining code data from said adjusting unit as the
code data of the segmented block.

2. – 4. (Canceled)

5. (Previously Presented) The apparatus according to claim 1, further comprising
an instruction unit that instructs whether to discard code data of bitplanes by said adjusting unit.

6. (Previously Presented) The apparatus according to claim 1, wherein said mode
selection unit selects the second coding mode for a frame which is input for the first time after a
number of input frames becomes a predetermined number.

7. (Previously Presented) The apparatus according to claim 1, wherein said
decoding unit performs bit-shifting of the code data by a number of discarded bitplanes by said
adjusting unit and locally decodes the bit-shifted code data.

8. (Currently Amended) A control method for a moving image coding apparatus that includes a computer processor and a storage unit storing a frame image and sequentially inputs and codes image data of frames constituting a moving image, the method comprising:

a mode selection step of adaptively selecting, for each frame, either a first coding mode ~~[[using]]~~ of coding a frame of interest by referring to another frame using an inter-frame correlation coding method or a second coding mode of coding a frame ~~separately of interest~~ without referring to another frame using an intra-frame coding method;

a segmentation step of segmenting image data of an input frame into a plurality of blocks;

a decoding step of locally decoding coded image data ~~in accordance with an output in~~ of the frame of interest only when the frame of interest had been encoded in the second coding mode selected by the mode selection step and storing the decoded image data of the frame of interest into the storage unit;

a computation step of (i) extracting, from a previous frame that has been locally decoded and stored in the storage unit in said decoding step, predicted data of a block image obtained by segmentation in the segmentation step and outputting a block obtained by subtracting the predicted data from the segmented block image, if the mode selected in said mode selection step is the first coding mode, or (ii) outputting the block segmented in the segmentation step, if the mode selected in said mode selection step is the second coding mode;

a transformation step of ~~transforming~~ executing discrete wavelet transformation for the block obtained in the computation step ~~[[into]]~~ to obtain spatial frequency component data;

a code data generating step of encoding the spatial frequency component data for each bitplane to generate code data for each bitplane;

an adjusting step of adjusting a code data amount by discarding code data corresponding to bitplanes from a least significant bit position to a predetermined bit; and

an output step of outputting remaining code data from the adjusting step as the code data of the segmented block, wherein the output step is performed, at least in part, by the computer processor.

9. (Currently Amended) A computer-readable storage medium storing a computer-executable program that, when executed by a computer, causes the computer to perform a method of controlling moving image coding apparatus that includes a storage unit storing a frame image and sequentially inputs and codes frames constituting a moving image, the method comprising:

a mode selection step of adaptively selecting, for each frame, either a first coding mode ~~[[using]]~~ of coding a frame of interest by referring to another frame using an inter-frame correlation coding method or a second coding mode of coding a frame ~~separately of interest~~ without referring to another frame using an intra-frame coding method;

a segmentation step of segmenting image data of an input frame into a plurality of blocks;

a decoding step of locally decoding coded image data ~~in accordance with an output from~~ of the frame of interest only when the frame of interest had been encoded in the second coding mode selected by the mode selection step and storing the ~~[[coded]]~~ decoded image data of the frame of interest into the storage unit;

a computation step of (i) extracting, from a previous frame that has been locally decoded and stored in the storage unit in said decoding step, predicted data of a block image obtained by segmentation in the segmentation step and outputting a block obtained by

subtracting the predicted data from the segmented block image, if the mode selected in said mode selection step is the first coding mode, or (ii) outputting the block segmented in the segmentation step, if the mode selected in said mode selection step is the second coding mode;

a transformation step of ~~transforming~~ executing discrete wavelet transformation for the block obtained in the computation step ~~[[into]]~~ to obtain spatial frequency component data;

a code data generating step of encoding the spatial frequency component data for each bitplane to generate code data for each bitplane;

an adjusting step of adjusting a code data amount by discarding code data corresponding to bitplanes from a least significant bit position to a predetermined bit position; and

an output step of outputting remaining code data in the adjusting step as the code data of the segmented block.

10. – 20. (Canceled)